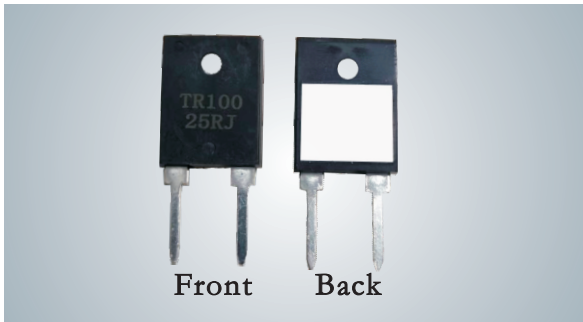


## TR 100 Power Thick Film Resistor

Catalogue

- Feature
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- Construction
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- Applications And Ratings
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- Performance



## Feature

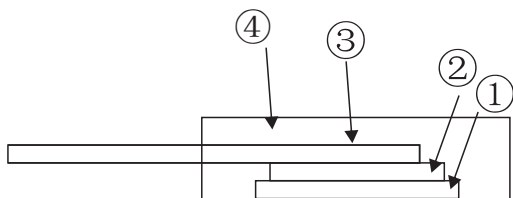
- I At 25°C case temperature heat sink mounted
- II TO-247 style power package
- IIIMolded case for protection and easy to mount
- IVElectrically isolated case
- VNon-Inductive design
- HS Compliant

## Application

Switching Power Supplies  
 Snubbers Circuits  
 Automated Machine Controller  
 RF Power Amplifiers

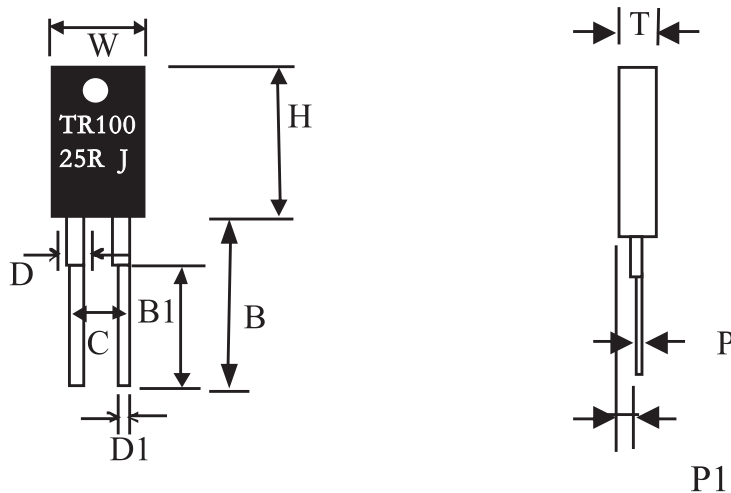
Low Energy Pulse Loading  
 UPS  
 Voltage Regulation

## Construction



①	Substrate, Alumina
②	Resistive layer
③	Lead wire
④	Full moded construction

## Dimensions



Type	Power	Dimensions(mm)									
		W	H	B	B1	D	D1	C	T	P	P1
TR	100W	15.6~16.0	20.5~20.96	13.5~15.5	11.2~13.2	3.45~3.81	1.42~1.6	9.9~10.42	4.69~5.21	0.55~1.0	2.15~2.67

## Reference Standards

JISC 5201-1

## Ordering Information

Example:

TR100	100	D	10R0	C2	B
(1)	(2)	(3)	(4)	(5)	(6)
Series Name	Power	Resistance	Resistance	T.C.R	Packaging

(1)Type:TR100 SERIES

(2)Power Rating: 100=100W

(3)Tolerance: D=  $\pm 0.5\%$ , F=  $\pm 1\%$ , J=  $\pm 5\%$ , K=  $\pm 10\%$

(4)Resistance Value:10R0=10 $\Omega$

(5)T.C.R: C2=  $\pm 50\text{ppm}/^\circ\text{C}$ , C1=  $\pm 100\text{ppm}/^\circ\text{C}$ , C=  $\pm 200\text{ppm}/^\circ\text{C}$  or  $\pm 300\text{ppm}/^\circ\text{C}$

(6)Packaging:B=Box(Packaging : Plastic recloseablebags(MOQ : 100PCS))

## Applications And Ratings

Type	Power (25 $^\circ\text{C}$ )	Tolerance			T.C.R ppm/ $^\circ\text{C}$
		$\pm 1\%$	$\pm 5\%$	$\pm 10\%$	
TR100	100	0.05 $\Omega$ ~1 $\Omega$			No Specified
		>1 $\Omega$ ~3 $\Omega$			$\pm 300$
		>3 $\Omega$ ~10 $\Omega$			$\pm 100 \pm 200$
		>10 $\Omega$ ~10K $\Omega$			$\pm 50 \pm 100 \pm 200$
		>10K $\Omega$ ~1M $\Omega$			$\pm 200 \pm 300$

- Operating Voltage: 700 max.

- Dielectric Strength: 1800VAC

- Insulation Resistance: 10G $\Omega$ min.

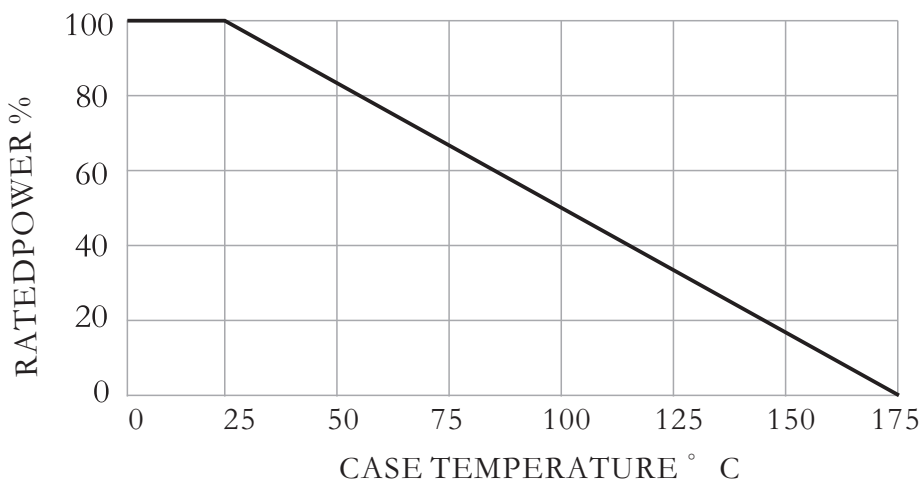
- Working Temperature Range: -65 $^\circ\text{C}$  to +150 $^\circ\text{C}$

- TR100 Working Temperature Range: -65 $^\circ\text{C}$  to +175 $^\circ\text{C}$

- Resistance Value <1 $\Omega$  is available

- Free air Power:25 $^\circ\text{C}$ , rated at 3.5W

## Derating Curve



## Performance

Test Items	Performance Requirements	Test Methods(JIS C 5 201-1)
Temperature Coefficient of Resistance (T.C.R.)	As Spec.	Referenced to 25°C , $\Delta R$ taken at +105°C
Short Time Overload	$\Delta R \pm 0.3\%$	2 times rated power with applied voltage not to exceed 1.5 times Maximum continuous operating voltage for 5 seconds
Load Life	$\Delta R \pm 1.0\%$	2,000 hours at rated power
Damp Heat with Load	$\Delta R \pm 0.5\%$	40 $\pm$ 2°C , 90~95% R.H. Max. working voltage for 1000 hrs with 1.5 hrs "ON" and 0.5 hrs "OFF"
Solderability	90% min. Coverage	245 $\pm$ 5°C for 3 seconds
Thermal Shock	$\Delta R \pm 0.3\%$	-65°C ~150°C , 100 cycles
Terminal Strength	$\Delta R \pm 0.2\%$	(Pull Test) 2.4N
Vibration, High Frequency	$\Delta R \pm 0.2\%$	20g peak
Dielectric strength:	$\Delta R \pm 0.15\%$	1800Vac 60 seconds